

WHAT IS CLAIMED IS:

1. A liquid crystal display device comprising:

an analog voltage signal generator for storing an input
5 synchronous signal and a plurality of input digital data
signal in response to a write enable signal, and converting
the stored digital data signal into a plurality of analog
voltage signal pairs in response to an output enable signal;

a plurality of reference voltage generators for dividing
10 a boosted source voltage according to the analog voltage
signal pairs from the analog voltage signal generator to
generate a plurality of reference voltages; and

a source driver integrated circuit for receiving the
plurality of reference voltages from the plurality of
15 reference voltage generators,

wherein a digital/analog converter of the analog voltage
signal generator changes a reference voltage value and
outputs a changed reference voltage value to the reference
voltage generators, thus changing a range of a contrast ratio
20 according to the changed reference voltage values when a
command changing a reference voltage value is transferred to
the digital/analog converter.

2. A liquid crystal display device as claimed in claim

1, wherein the analog voltage signal generator includes:

a data storage section for storing the input synchronous signal and the plurality of input digital data signals in response to the write enable signal;

5 the digital/analog converter for converting the plurality of input digital data signals stored in the data storage section into a plurality of analog signals in response to the input synchronous signal when the output enable signal is generated; and

10 a buffer amplifier for amplifying the plurality of input analog signals and outputting the plurality of analog voltage signal pairs.

3. A liquid crystal display device as claimed in claim
15 2, wherein the data storage section stores a fixed reference voltage signal pair according to voltage-transmission factor curve feature, and the digital/analog converter changes the fixed reference voltage signal pair stored in the storage section in response to an external reference voltage change
20 command and outputs a changed reference voltage.

4. A liquid crystal display device as claimed in claim 1, wherein the plurality of reference voltage generators include a plurality of resistors connected to each other in

series between a power supply terminal and a ground terminal for generating the plurality of reference voltages.